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NOTES ON *AMATHUSIIDAE*, *BRASSOLIDAE*, *MORPHIDAE*, ETC., WITH DESCRIPTIONS OF NEW FORMS.

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(Plates III.–VI.)

AMATHUSIIDAE

Faunis

In this genus I have no special remarks to make, only several new subspecies to describe.

Faunis arcesilaus baliensis subsp. nov.

♂ ♀. This race has hitherto been united with the Javan race *a. caneus* Hbnr. both by myself and others, but I have come to the conclusion that it is distinct.

Differs from *a. caneus* in the more smoky olive, less rufous tinge above; this is more conspicuous in the ♀ ♀. Below the transverse dark bands are more conspicuous than in the vast majority of *a. caneus*.

Hab. Bali; 1 ♂, 2 ♀ ♀, Danau Bratan, 2300 ft., January 1911 (E. Stresemann); 1 ♂, Gunung Bratan, 4000–6000 ft., January–February 1911 (E. Stresemann); 1 ♂, Bali, 2000–4000 ft., March 1896 (W. Doherty). (Type ♀, Danau Bratan.)

Faunis arcesilaus bankensis subsp. nov.

♂ ♀. Nearest to *a. hirata* Dr. Nicév., but smaller and much brighter, more uniform rufous above. Below much paler and more yellowish olive.

Hab. Banka, 2 ♂ ♂, 1 ♀, 1891 (Dr. Hagen).

Faunis stomphax lautensis subsp. nov.

♂. Differs from *s. stomphax* below in the oblique white band being much wider and more distinct, reaching to terminal margin. On the upperside this band shines through from below, which, as far as I am aware, is never the case in *s. stomphax*, where the band is often entirely absent, and never reaches the margin.

Hab. Pulo Laut, 2 ♂ ♂, 1891 (W. Doherty).

Faunis phaon sumatranus subsp. nov.

♂. Differs from *p. phaon* in the smaller and more rounded hindwing and in the basal half of hindwing below being uniform with the outer half, **not** much darker, in the transverse band bordering this basal half being absent, and in there being in its place an oblique darker line from costa to vein 4, as in *stomphax*.



Size = *stomphax plateni*, being smaller than *p. phaon*.

Hab. Sumatra, 2 ♂♂ (Felder coll.).

Of *menado* Hew. I have 1 ♂ from the Island of Siao which is nearest to *m. syllus* Fruhst. from Gangir, but smaller. I cannot, however, describe it from one not very fresh specimen.

XANTHOTAENIA

I have no remarks to make except that I consider this genus ought to come before instead of after *Aemona*, as Fruhstorfer has placed it.

Xanthotaenia busiris batuensis subsp. nov.

♂. Above considerably paler than *b. busiris* and much more cinnamon rufous. Below it is even paler than *b. polychroma* Hag.

Hab. Batu Island, 2 ♂♂, 1896-97 (H. Raap).

AEMONA

I only have a new subspecies to describe.

Aemona amathusia tonkinensis subsp. nov.

♂. Differs from *a. amathusia* above in having a more rufous less greyish wash, and in the postmedian bands of the forewings being more developed, also on the hindwing the zigzag band basad of the postmedian line is much more pronounced and rufous brown. Below the difference is almost nil.

Hab. Tonkin, 2 ♂♂, Yubay.

HYANTIS

Here I can only remark that my *H. albiplaga* must be reduced to a subspecies. It shows the same light and dark variation that is found throughout the range of the single species *hodeva* Hew. The much more abundant light phase must bear the name :

Hyantis hodeva albiplaga ab. *pallida* ab. nov.

Both *h. albiplaga* and the ab. *pallida* differ from *h. fuliginosa* G. Smith and its ab. *oxyophthalma* Stich. in the ocellus on the hindwing above being much more flat and less defined in addition to other differences. *H. h. albiplaga* is from the Snow Mountains, while *h. fuliginosa* is from Kapaur.

Morphopsis

(Pl. IV. ff. 1-4)

Here we find some interesting problems. Hitherto, owing to the scarcity of this genus in collections, two totally different species have been confused under the name *M. albertisi* Oberth. Even Herr Fruhstorfer in *Seitz* failed to perceive this fact. The error arose because Mr. Henley Grose Smith, when he worked out Doherty's collections from Biak and Humboldt Bay, had, like most of us, never seen a ♂ of true *albertisi*. The second species remained in collections as the ♂ of

albertisi till August of this year, when it was described and figured by Messrs. Joicey and Talbot (*Trans. Entom. Soc. Lond.* 1916. p. 74. pl. V. f. 2. ♂) under the name of *M. biakensis* sp. nov. This name is unfortunate, as the species occurs in several parts of the mainland of New Guinea in a form identical with the specimens from Biak. As the ♀ of *biakensis* has not been figured, I give (Pl. IV. fig. 4) a figure of a specimen from Mafor Island; the ♂ figured (f. 3) is from Humboldt Bay.

I give for comparison at fig. 1 a ♂ of *M. albertisi astrolabiensis* Stich., and at fig. 2 a ♀ of my new *M. a. milnei*. Messrs. Joicey, Noakes and Talbot described in 1915 (*Trans. Entom. Soc. Lond.* 1915. p. 366. pl. LX. f. 1) a subspecies of my *Morphopsis ula*, which is of great interest faunistically.

***Morphopsis albertisi milnei* subsp. nov.**

(Pl. IV. f. 2 ♀)

♂. Differs above from *a. albertisi* in its paler rufous ground-colour, in the conspicuous fulvous orange patch between the large ocellus and the terminal margin of the forewing, and in the greater width of the oblique yellow band of the forewing towards termen. Below it differs in its sharper markings and in the almost complete absence of the dark cloud-band between and beyond the ocelli of hindwing.

♀. Differs above in the darker forewings, in which the postocular patch and oblique band show similar differences as in the ♂, and in the submarginal band of hindwing being reddish grey-brown like the rest of the wing, not rusty orange. Below it differs chiefly in the more sharply defined markings.

Hab. Milne Bay, S.E. New Guinea, 4 ♂♂, 3 ♀♀, January 1899 (A. S. Meek). (Type ♂.)

***Morphopsis albertisi setakwaensis* subsp. nov.**

♂♀. Differ from *M. a. albertisi* and *M. a. astrolabiensis* in the much straighter, less zigzag submarginal band to the hindwing above, which, like *a. astrolabiensis*, is much redder, less orange than in *a. albertisi*.

Hab. Snow Mountains and coast of S.W. Dutch New Guinea, 10 ♂♂, 1 ♀, Utakwa, Setakwa, and Eilanden Rivers (A. F. R. Wollaston and A. S. Meek).

***Morphopsis albertisi mambarensis* subsp. nov.**

♀. Differs in the very dark dusky colour above and very dark outer half of hindwing below. This ♀ appears to be the largest of all the ♀♀ of the *albertisi* forms.

Length of forewing: 59.5 mm. Expanse: 126.5 mm.

Hab. Mambare River, N.E. New Guinea, 1 ♀, 5000 ft., March 1906 (A. S. Meek).

***Morphopsis albertisi kumusii* subsp. nov.**

♂♀. Differ in the small size, very bright rufous colour, in the small ocellus on hindwing above, and the very large orange postocular patch of forewing.

Length of forewing: ♀, *a. albertisi*, 55 mm. Expanse: 117 mm.

" " " ♀, *a. kumusii*, 49 mm. " 104 mm.

Hab. Kumusi River, N.E. New Guinea, 3 ♂♂, 1 ♀, August 1907 (low elevation) (A. S. Meek).

The following key to the subspecies of *M. albertisi* will, I trust, be of use :

1. { Subterminal band of hindwing very strongly dentate and orange in colour 2.
1. { Subterminal band of hindwing not so strongly dentate and not orange,
more uniform in colour with wing 3.
2. { Oblique pale band of forewing wider *a. albertisi* Oberth.
2. { Oblique pale band of forewing narrower *a. aigion* Fruhst.
3. { Postocular orange patch on forewing absent or barely indicated 5.
3. { Postocular patch on forewing conspicuous 4.
4. { Postocular patch smaller, general colour darker and duskier
a. milnei Rothsch.
4. { Postocular patch larger, general colour brighter, more rufous
a. kumusii Rothsch.
5. { Subterminal band of hindwing more dentate 6.
5. { Subterminal band of hindwing much less dentate *a. setakwaensis* Rothsch.
6. { Larger, much darker, and duskier *a. mambarensis* Rothsch.
6. { Smaller, brighter rufous *a. astrolabiensis* Stich.

Morphopsis biakensis Joicey & Talbot

(Pl. IV. ff. 3, 4)

The Tring Museum has the following specimens of this species :

1 ♂, 1 ♀, Suer, Mafor Island, May and June 1897 (W. Doherty); 5 ♂♂, Kapaur, December 1896 (low country) (W. Doherty); 2 ♂♂, Humboldt Bay, September—October 1892 (W. Doherty); 1 ♂, N.W. Dutch New Guinea (H. Kühn).

This species differs at first sight from *M. albertisi* by its smaller and round hindwing, and the strongly lobed area of forewing below vein 1.

Taenaris

Here I have a number of new forms to describe and some remarks to make.

Taenaris diana bisae subsp. nov.

♂. Above differs from *d. diadema* Fruhst. in the brown above median and between costa and vein 4 being darker. Below there is little difference; 1 ♂ has an incomplete secondary ocellus above tornus of hindwing, and the second ♂ has no trace of this.

♀. Differs very considerably from ♀ *d. diadema*; the pale area is almost pure white, **not** suffused with cream yellow, and on both wings is much more sharply separated from the brown suffused portions of the wings; the outer edges being sharply defined. Below the anal ocellus of hindwing is round and single, and the pale areas also much whiter.

Hab. Pulo Bisa, N. of Obi Island, 2 ♂♂, 1 ♀, September 1897 (W. Doherty).

Taenaris dina insularis subsp. nov.

(Pl. III. ff. 1 ♂, 2 ♀)

Herr Fruhstorfer in *Seitz* informs us that up to the time of writing *dina* Stand. had only been found in what was then the German portion of N.E. New Guinea. The Tring Museum possesses a ♂ and ♀ from Salawatti, a ♂ (?) and a ♀ from the Snow Mountains which represent two new and distinct subspecies.

♂. Differs from *d. dina* above in having the white portions of the wings strongly suffused with buff, the brown of the costal and apical third of forewing paler, more liver-brown, and extending farther into cell and on to vein 3, and the discocellulars are brown, not white. The hindwings are entirely buffish white, with only a border of dark brown, and the dark patch surrounding the ocelli is smaller and darker, and is surrounded, except on the inner side, with a broad golden ring.

Below it differs in the white area of forewing being less pure and the apical brown area being more extended. On the hindwing it differs in the white being less pure, the apical ocellus larger, and in the space between median vein and abdominal margin above the ocellus being orange buff.

♀. Differs above in the whole hindwing being white, with only a marginal band of sooty brown, and the dark patch surrounding the double ocellus much more sharply defined. Below on hindwing the dark margin is narrower, the area above ocellus and below median vein is buff, **not** merely tinged with creamy buff, and the yellow band round the double ocellus encircles it much more, while the black outermost band is much narrower.

Hab. Salawatti, 1 ♂, 1 ♀ (H. Kühn) ; 1 ♂ (?) (H. Kühn) (labelled erroneously Sorong).

Taenaris dina sordidior subsp. nov.

♀. Differs from *d. dina* above in the dirty buffy white, **not** pure white, of forewing, the dark brown heavily-defined nervures and the brownish suffusion running in from apical and terminal areas. On hindwing the brown-grey outer area is less dense and paler, while the whole wing above median vein is whiter, though all white parts are much suffused with buff.

Hab. Snow Mountains and Coast of S.W. Dutch New Guinea, 1 ♀, near Oetakwa River, 3000 ft., December 1910 (A. S. Meek).

Taenaris microps Gr. Smith

Fruhstorfer suggests that this is either an aberration of *g. gorgophone* or a species having the same relationship to it as *dina* has to *dimona*. It is certainly to my mind a good species and **not** an aberration, but it is much nearer to *dimona* than to any of the forms of *gorgo*.

Taenaris bioculatus cameronensis subsp. nov.

♂. Above nearest to *b. charondos* Fruhst., but almost entirely suffused on both wings with sooty grey. Below pale areas on both wings duller and more suffused with grey.

Hab. Mount Cameron, Owen Stanley Range, 1 ♂, July—August 1896 (Anthony).

Taenaris catops rosseliana subsp. nov.

♂ ♀. Above very similar to *c. adriana* Fruhst. from Fergusson, but differs at first sight by the black on the outer portion of hindwing only extending just beyond vein 4, **not** to beyond vein 2. Below the much less extent of the black on both wings is at once conspicuous.

Hab. Rossel Island, Louisiade Islands, 4 ♂♂, 9 ♀♀, January 1898 (A. S. Meek) ; 6 ♂♂, 4 ♀♀, November 1915 (W. F. Eichorn).

Taenaris phorcas admiralitatis subsp. nov.

♂ ♀. Above differ from all other forms of *phorcas* in the strongly reduced white area of the hindwing, while on the forewing the white area is as extended as in *p. uranus* Stand. Below the white area on the hindwing is also much reduced.

Hab. Admiralty Islands, 7 ♂♂, 7 ♀♀, St. Gabriel Island, April 5-6, 1899, (Capt. Cayley Webster); 3 ♂♂, 5 ♀♀, Manus (Meek Expedition).

Taenaris onolaus Kirsch and **Taenaris honrathi** Stand.

Herr Fruhstorfer in *Seitz* unites these and a number of other forms as subspecies of one species *onolaus*. In my opinion this is not correct, and I believe that these two forms form two quite distinct species, each with a group of subspecies. The following is the synoptical table of the two species:

Taenaris honrathi honrathi Stand., Waigen.

Taenaris honrathi sekarensis Stand., West New Guinea.

Taenaris honrathi ritsemæ Fruhst., Humboldt Bay.

Taenaris honrathi rebeli Fruhst., N.E. New Guinea.

Taenaris onolaus onolaus Kirsch, N.W. New Guinea.

Taenaris onolaus ida Hour., N.E. New Guinea.

Taenaris onolaus saturatior Fruhst., S.E. New Guinea.

Taenaris onolaus montana Stich., Upper and Middle Aroa River.

Taenaris scylla Stand.

This fine species was obtained on Biak Island as well as on Mysore (Korrido) by Messrs. A., C., and F. Pratt when collecting there in 1914 for Mr. Joicey.

Taenaris dioptrica orientalis subsp. nov.

♂. Nearest to *d. onesimides* Fruhst. Differs above in its paler and more yellow ground colour and in the much greater amount of brown-black between anal angle and vein 3. Below it differs in its paler forewings and much less extent of black on hindwings.

♀. Differs above in the much darker outer two-fifths of hindwing, and in the larger and blacker ocellus. Below on the forewing it differs in the large pale whitish patch between veins 1 and 4, and in the ocelli being larger, darker, and better defined.

Hab. N.E. New Guinea; 2 ♂♂, 6 ♀♀, Erima (Dr. Hagen), Astrolabe Bay and Constantinhafen (Wahnes).

Taenaris artemis queenslandica subsp. nov.

♂. Nearest to *a. sticheli* Fruhst. Differs from this form in the larger ocelli above, which are widely ringed with golden yellow. Below the ocelli are slightly larger and more sharply defined.

Messrs. Waterhouse and Lyell record *a. jamesi* Butl. in 9 ♂♂, 2 ♀♀, from Darnley Island. (Type locality Yule Island.)

Hab. North Queensland, 1 ♂.

Taenaris artemis tineutus Frnhst.

Herr Frnhstorfer in *Seitz* asserts, without having made any inquiries at Tring, that only three specimens of this very striking form are known, the type being in the British Museum from the Crowley collection. As a matter of fact there are in the Tring Museum 4 ♂♂ and 9 ♀♀, collected by A. S. Meek, March and April 1897, and the larger number of these have the costal area of forewing grey, **not** white, and the abdominal margin of hindwings also strongly suffused with black scales.

Taenaris meeki spec. nov.

(Pl. III. ff. 3 ♂, 7 ♀)

♂. Closely allied to *T. a. artemis* in the absence of the black scent-patch on abdominal area of hindwing; but differs at a glance by the much narrower and more produced forewings, the much more deeply concave hindmargin of the forewings, and in the much more defined ocellus, which is bright blue in the centre and broadly ringed with orange golden.

Forewing above basal half obliquely bluish mouse-grey, with white nervures, outer half white, apex broadly bluish mouse-grey.—*Hindwing* above basal three-fifths white, golden buff between veins 1 and 2, outer two-fifths bluish mouse-grey between costa and vein 2, beyond vein 2 to abdominal margin whitish grey; on this whitish grey area are bunches of cinnamon hairs. Terminal and abdominal margins blackish grey. Ocellus of hindwing above very blue in black centre, widely ringed with orange golden. Below the forewing is similar to above, but the grey is darker; the hindwing is all white suffused with grey in outer third and with buff between abdominal margin and vein 2.

♀. Larger. *Forewing* above with grey much darker, but otherwise coloured as in ♂.—*Hindwing* with the outer dark area blackish sooty brown-grey, and the abdominal area almost all sooty brown-grey, and the buff area paler; ocellus very large. Below in forewing the white area more diffused and not reaching termen, in hindwing the dark outer area reduced.

Length of forewing: ♂ 48 mm., ♀ 58 mm. Expanse: ♂ 102.5, ♀ 123 mm.

Hab. Snow Mountains, S.W. Dutch New Guinea; ♂, Upper Setekwa River, 2000–3000 ft., June–July 1910; ♀, Near Oetakwa River, 3500 ft., October–November 1910 (A. S. Meek).

Taenaris perplexus spec. nov.

This is a very puzzling species; it is nearest in appearance to *t. anella* Stich., and like that form and its typical form *tainia tainia* Frnhst. has the black scent-scale patch on abdominal area.

♂. *Forewing* above white, apex and area between vein 3 and inner margin, except middle third of inner margin, pale grey.—*Hindwing* above white, outer two-fifths above vein 2 deep grey, except between the reflected ocelli, where it is suffused with white; the ocelli show through from below, but are entirely absent above. Below on the forewing the white is much restricted, and on hindwing the whole central three-quarters is white; the grey on both wings is darker, and the ocelli as in *t. anella*.

♀. Above entirely white; forewing with apex and costal area brownish grey; hindwing, basal third washed with golden buff, outer margin broadly brownish grey.

Below: forewing, apical third dark brownish grey; hindwing, inner half white suffused with buff, outer half and costal area broadly dark sooty brownish grey.

Length of forewing: ♂ 44 mm.; ♀ 52 mm. Expanse: ♂ 94 mm.; ♀ 112 mm.

Hab. Triton Bay, S.W. New Guinea, ♂ (Webster), August 1896; ♀ (H. Kühn), July 23, 1896.

***Taenaris rothschildi parallelus* subsp. nov.**

♂ ♀. This is a parallel form to *artemis ziada* Fruhst., and, apart from the patch of black scent-scales on abdominal area, only differs at first sight by the lack of the orange base of hindwing and the pale pure grey, not reddish brown-grey, of its colour. Pure grey above, apical half of forewing, except apex, pure white, abdominal area of hindwing in ♂ with patch of dark buff hairs, ocellus generally absent or ill defined. Below much darker than in *r. rothschildi*, but not so dark as in *r. merana*.

Hab. Misol, 13 ♂♂, 2 ♀♀ (Dr. Tauern); 5 ♂♂, 3 ♀♀, January 1899 (H. Kühn).

***Taenaris myops miscus* Fruhst.**

Fruhstorfer states that only 1 ♂, the type from Normanby Island in the British Museum, is known. There are in the Tring Museum 6 ♂♂, 4 ♀♀, obtained by A. S. Meek on Goodenough Island, March—May 1913.

***Taenaris myops misolensis* subsp. nov.**

♂. Above similar to *m. myops*, but the hindwing below is, except the base and the outer edge beyond apical ocellus from costa to vein 4, pure dull white.

♀. Has underside of hindwing also whiter, with no buff suffusion.

Hab. Misol, 2 ♂♂ (Dr. Tauern); 1 ♀, January 21, 1899 (H. Kühn).

***Taenaris kirschi* Stand. and *Taenaris mailua* Gr. Smith**

Fruhstorfer in *Seitz* includes these and a number of similar forms as subspecies under *myops* Feld. I do not agree with this treatment, and as I have several new forms which demonstrate a much wider distribution for *kirschi* I am convinced that there are three species, of which the following table gives the synopsis:

Taenaris myops myops Feld., Aru Islands.

Taenaris myops praxedes Fruhst., Salawatti.

Taenaris myops fergussonia Fruhst., Fergusson Island.

Taenaris myops miscus Fruhst., Normanby and Goodenough Islands.

Taenaris myops misolensis Rothsch., Misol.

Taenaris myops verbeeki Fruhst., S.E. New Guinea.

Taenaris kirschi kirschi Stand., S.E. New Guinea.

Taenaris kirschi occidentalis Rothsch., Kapaur.

Taenaris kirschi interfaunus Rothsch., Humboldt Bay.

Taenaris kirschi convergens Rothsch., Fergusson Island.

Taenaris mailua mailua Gr. Smith, Mountains of S.E. New Guinea.

Taenaris mailua littoralis Rothsch., Coastal Region of S.E. New Guinea.

Taenaris mailua rosseli Fruhst., Rossel Island.

Taenaris kirschi occidentalis subsp. nov.

♂. Above differs from *k. kirschi* in being much darker and browner; the white on the forewing is more diffused and ill-defined, being also suffused with greyish brown; on the hindwing it differs in only having the basal third whitish and this much suffused. Below it is much darker, and the white is **not** saturated with orange buff.

♀. Above has much more white on forewing and much less on hindwing. Below it presents the same differences as the ♂ does.

Hab. Kapaur, 3 ♂♂, 1 ♀, December 1896—January 1897 (W. Doherty).

Taenaris kirschi interfaunus subsp. nov.

♂. Differs from *k. kirschi* and *k. occidentalis* above in the much greater extent of white on the forewing, and differs from *k. occidentalis* in being much whiter on the lower half of the dark outer two-thirds of hindwing and on abdominal area. A second ♂ has the dark areas silver-grey but distributed in the same proportions.

Hab. Humboldt Bay, 2 ♂♂, September—October 1892 (W. Doherty).

Taenaris kirschi convergens subsp. nov.

♂. Above differs from *k. kirschi* in the orange golden costal area of forewing and the almost obliterated white area of forewing. On the hindwing it has less white than *k. kirschi* but more than *k. occidentalis*. All the white is suffused with brownish. Below the white on both wings is much reduced, and the anal ocellus is very conspicuous from its very broad deep orange border.

Hab. Fergusson Island, 1 ♂, July—December 1894 (A. S. Meek).

Taenaris mailua littoralis subsp. nov.

♂♀. Differ above from *m. mailua* in being paler grey.

♀. Below is generally whiter on hindwing.

Hab. Milne Bay, 8 ♂♂, 6 ♀♀, November 1898 (A. S. Meek).

Morphotenaris

Here I have nothing to add, and only give drawings of two hitherto unfigured forms.

Morphotenaris schönbergi littoralis Rothsch.

(Pl. III. f. 4)

Morphotenaris schönbergi wollastoni Rothsch.

(Pl. IV. f. 5)

Stichophthalma

Here there are several points to mention.

Stichophthalma sparta Nicév.

(Pl. IV. f. 6. ♂)

Herr Fruhstorfer has placed this as a subspecies of *howqua*, which was entirely due to the ♂ being unknown. It is a quite distinct species allied to *louisa*.

♂. Basal two-fifths of forewing rufous-orange, with lines of underside showing through, outer three-fifths cream-colour, with a submarginal row of small arrow-shaped or chevron-shaped dark brown patches and a marginal band of long lunate spots or streaks.—Hindwing, basal two-thirds rufous-orange also, with the lines of the underside showing through, outer third buffish yellow with large black arrow-shaped chevrons. Below it is much yellower than *louisa*, and the lines are much straighter and less crenulated.

1 ♂, Kindah, Upper Burmah.

***Stichophthalma louisa siamensis* subsp. nov.**

♀. Differs from the other two races of *louisa* by the basal half of forewing and the whole of the hindwing above being brownish rust-red, and the arrow-shaped or chevron-shaped patches on both wings being much larger. Below it is much darker and more suffused with green.

Hab. Siam, 1 ♀.

***Stichophthalma fruhstorferi* Rüb.**

Fruhstorfer places this as a subspecies of *louisa*, but this turns out to be incorrect, as I have specimens from the same locality of *S. louisa mathilda* and *fruhstorferi*. The latter is a very distinct species, which is much nearer to *camadeva*, as the submarginal patches and violet tint on the hindwings show.

***Stichophthalma cambodia* Westw.**

Fruhstorfer suggests that this may be a subspecies of *louisa*. It is, however, quite a distinct species, and I have recently described a closely allied form from Siam, which flies together with my *louisa siamensis*, and which I have named *S. godfreyi*.

***Stichophthalma camadeva nagaensis* subsp. nov.**

♂. Above much paler than either *c. camadeva* or *c. camadevroides*, and at once conspicuous by its golden yellow costa and very small chevrons on the forewing. Below more uniform rufous, and at once distinguishable from the other two subspecies by all the transverse lines and bands being much straighter, less zigzag, and less crenulate.

Hab. Naga Hills, 1 ♂.

***Zeuxidia semperi excelsa* subsp. nov.**

♂. Distinguished at first sight from *s. semperi* and *s. therianaca* by its large size and very broad paler lavender band on forewing, and the outer paler lavender band of hindwing being throughout of uniform width. Below it is at once distinguished from both by the strong violet mauve suffusion over the whole surface of the wings.

Length of forewing: 61 mm. Expanse: 128 mm.

Hab. Negros, 1 ♂, low country, February 1896 (J. Whitehead).

Thauria

Here I can only repeat what I have said in the *Ann. Mag. Nat. Hist.* (8) 17. p. 475, 1916—viz., that *T. lathyi* is a distinct species, and not a local form of *aliris*. The Tring Museum possesses from the Tenasserim Valley, from Toungoo, Burmah, and from Perak specimens of true *Th. aliris pseudoliris* with very narrow yellow oblique bands on the forewings, which in the ♂ have large androconial hair-tufts in the cell of the hindwing, and other specimens with broader white bands to the forewings and **no** androconial hair-tufts in the cell of the hindwing. *Th. aliris intermedia* Crowley has very conspicuous androconial tufts. Below is the synoptical table of the two species.

Thauria aliris aliris Westw., Borneo.

Thauria aliris pseudoliris Butl., South and Central Burmah, Tenasserim, and Malay Peninsula.

Thauria aliris intermedia Crowley, N. Burmah.

Thauria lathyi lathyi Fruhst., Tonkin.

Thauria lathyi siamensis Rothsch., Siam.

Thauria lathyi amplifascia Rothsch., South and Central Burmah, Tenasserim, Malay Peninsula.

BRASSOLIDAE

This family has been of late years revised by Stichel and Fruhstorfer, but I have grave doubts as to whether it has been correctly treated. On the one hand the typical genus *Brassolis* consists of heavily built small or medium-sized insects with the general fascies of the moth family *Castniidae*, while their larvae resemble large Hesperid larvae minus the thin long neck, being smooth and cylindrical, with a largish and round horny head. On the other hand we have the genera *Dynastor*, *Opsiphanes*, *Dasyophthalma*, *Eryphanis*, *Caligo*, and *Narope*, which either have the general fascies of the *Satyridae* or of heavy-bodied *Nymphalidae*, while their larvae have horned heads like *Charaxes*, and long rather flat bodies with long forked tails like *Satyridae* larvae. Then there is *Penetes*, of which the larva is unknown, and appears in general fascies intermediate between *Opsiphanes* and *Brassolis*, but nearer the former.

I personally consider the genus *Brassolis* should alone be retained in the family *Brassolidae* and the rest form a new family (*Caligonidae*) of their own, which has been treated by Fruhstorfer as a subfamily only. Fruhstorfer, while stating that the larvae of *Dynastor* were undescribed, nevertheless puts it calmly into the section he calls subfamily *Brassolinae* without tail-forks. The truth is that the larvae have long tail-forks, and I figure that of *napoleon* and that of *darius* on Pl. III. f. 5 and Pl. VI. f. 13.

CALIGONIDAE

Dynastor napoleon Westw.

(Pl. III. f. 5 larva, f. 6 pupa)

Larva large and slug-like, bright grass-green with a number of short hairs; head rufous brown with two short spines on each side and a pair of much longer ones behind. Along the back are four lozenge-shaped or longish oval chestnut patches with a black central spot. The last segment ends in two very long tails.

Pupa resembles in shape a large pupa of *Opsiphanes*, greyish buff except on thorax, where it is mouse-grey, and a large grey-brown patch on wing-cases enclosing some white spots, a white oblong mark at base of antennae.

Described and figured from a sketch by E. Hartgen.

Food plants: Bromeliaceous plants, "Travata," January and February.

***Dynastor darius darius* Fabr.**

(Pl. VI. f. 13 larva, f. 11 pupa)

Larva much darker green than that of *napoleon*, less hairy, and with only one large and one smaller lozenge spot on the back, head dull brown, horns and tails much shorter.

Pupa deep grass-green with irregular black-and-white patches on wing-cases and at base of antennae.

Food plants: pineapple and other Bromeliads, "Gravata."

Described and figured from a sketch by E. Hartgen.

***Dynastor macrosiris strix* Bates and *D. macrosiris hannibal* Oberth.**

Of *m. strix* the Tring Museum has 1 ♀ from Merida, Venezuela (Briceno coll.). Of *m. hannibal* it has 1 ♂, Colombia! (Felder coll.) and 1 ♀, Sarabo, near Pasto, S. Colombia (W. Goodfellow).

Of *D. napoleon* there are in the Tring Museum 11 ♂♂, 9 ♀♀.

***Opsiphanes aorsa colombiana* subsp. nov.**

♂. Above differs from *a. hihanis* Stich. in the oblique band of the forewing being darker and brighter orange and considerably broader below vein 4. Below it is intermediate in colour and marking, but the postmedian angled cream band has the lower half broken into spots as in *a. hihanis*.

Hab. Colombia, 1 ♂, Bogota.

***Opsiphanes syme colombicola* subsp. nov.**

♂. Differs from *s. syme* and *s. fumosa* in being much greyer above, the basal two-thirds of forewing and the disc of hindwing having hardly any yellow suffusion. Below the ground colour of hindwing is also much greyer and duller.

Hab. Colombia, 1 ♂, Popoyan, Lehmann.

***Opsiphanes batea batea* Hbn.**

(Pl. V. f. 8 larva, f. 6 pupa)

Larva long, narrow, flat, and sluglike green; down centre of back runs a pinkish mauve line bordered on each side with white; head with two horns behind pinkish mauve; tail-forks medium pinkish mauve; legs, pro-legs, and underside pinkish mauve; legs tipped with black.

Pupa whitish grey streaked with darker grey, and with bright reddish pink lines except on the wing-cases.

Described and figured from a sketch by E. Hartgen.

Food plant: a species of palm.

Opsiphanes cassiae lucullus Fruhst.

(Pl. V. f. 7 larva, f. 5 pupa)

Larva long, narrow, cylindrical, and sluglike apple green, with whitish tinge including the medium tail-forks ; head, with two pairs of horns, lavender grey.

Pupa bright green, with grey ridge to hind edge of wing-cases.

Food plant : banana.

Described and figured from a sketch by E. Hartgen.

Opsiphanes tamarindi latifascia subsp. nov.

♂. Similar to *t. incolumis* Stich., but differs at once by the oblique band of the forewing being much whiter and quite double as wide ; the dark ground colour is darker and duskier. Below it is darker and the markings more strongly defined.

Hab. S.E. Peru, 1 ♂ Oroya, Inambari ; 3000 ft., dry season, April 1901 (G. Ockenden).

Opsiphanes bogotanus bogotanus Dist.

(Pl. VI. f. 5 larva, f. 6 pupa)

Larva slug-shaped, long, rather flat. Above dull apple-green, with broad dorsal line of pale brick-red, the edges of which line are darker ; head greenish brown, with three pairs of horns.

Pupa deep apple-green, with large golden spot on each side.

Food plant : banana.

San Antonio s. Tocota, 1500-1700 m. = 4960-5550 ft., Colombia.

Described and figured from one larva and two pupae sent by A. H. Fassl.

Opsiphanes bogotanus peruanus subsp. nov.

♂ ♀. Differs above from the largest *b. bogotanus* in being darker, with hardly any red shade, and the oblique band on the forewing is whiter and much broader. Below the ground-colour is more uniform, and the dark suffusion between base of hindwing and ocellus is absent.

Hab. Peru, 9 ♂♂ Chanchamayo ; 1 ♀ (Felder coll.), Peru.

Opsiphanes invirae remoliatus Fruhst.

(Pl. VI. f. 10 larva, f. 12 pupa)

Larva sluglike, thick in middle, tapering to both ends, bright green, median dorsal band and broad band below spiracles golden yellow ; head with four short horns brownish pink, brighter red on back portion ; tail-forks medium darker green.

Pupa light green, with golden spot on each side.

Food plant : *girica* and palms.

Described and figured from a sketch by E. Hartgen.

Opsiphanes flemmingi spec. nov.

(Pl. V. f. 4)

♂. This is a most remarkable species ; above it much resembles *berecynthia* Cr., but below it agrees only with *O. singularis* Weym. Above deep rufous chocolate brown ; an ill-defined, much obliterated, curved, oblique band beyond cell of forewing

reaching from costa nearly to tornus ; three white spots, of which the third is largest just before apex ; a large black spot representing ocellus of underside just beyond oblique band. Hindwing without any markings, but two large patches of black androconia. Beneath rufous yellow, strongly vermiculated with black and grey ; the position of ocelli and other pattern best seen from figure.

Length of forewing : 54 mm. Expanse : 114.5 mm.

Hab. Rio Dourango, N.W. Ecuador, 1 ♂, 350 ft., June 1901 (Flemming and Miketta).

***Opsiphanes berecynthia buenavistae* subsp. nov.**

♂ ♀. Above much like the subspecies *b. berecynthina* Hopf. ; but curved orange band of forewing narrower and more angled. Below duller and greyer.

Hab. Bolivia, 6 ♂♂, 3 ♀♀, Buenavista, E. Bolivia, 750 m. = 2437 ft., August 1896—April 1897 (J. Steinbach), (type ♀) ; 1 ♀ Salampioni, 800 m. = 2600 ft. (Simons) ; 1 ♂, San Ernesto, 1000 m. = 3250 ft., September 1900 (Simons) ; 1 ♂, Mapiri District, 1895 ; 1 ♂, Sta Cruz de la Sierra, 1905–1906 ; 1 ♂, Prov. Sara, February 1904 (J. Steinbach).

***Opsiphanes josephus excisus* subsp. nov.**

♂. Differs above from *j. josephus* in the wider band and less falcate wing ; this orange band is much more excised on the inner side than in either *j. josephus* or *j. excultus*.

♀. Similar to ♂, but much larger, and has a rather broad orange margin to the hindwing above vein 4 ; the band on the forewing is so excised and reduced that it resembles a picture of a flash of forked lightning. Below both sexes are paler than in either of the other subspecies. I believe this is the first recorded ♂ of *josephus*.

Hab. Colombia Coast Region, 1 ♂, 1 ♀, Rio Dagua (W. Rosenberg).

Caligo

Here there are numerous remarks to make.

***Caligo teucer* Linn.**

Herr Stichel has wrongly united *minor* Kaye with his *t. insulanus*, which has caused Fruhstorfer to rename *minor* as *eurylochus phryasus*.

***Caligo ilioneus pampeiro* Fruhst.**

(Pl. V. f. 1)

Larva long, cylindrical, tapering sharply to both ends, brownish wood yellow tinged with pink, with a median dorsal very sharply defined black-brown line, and two lateral ones less straight, much less sharp, and paler, more greyish ; in between these three lines numerous cloudy and indistinct greyish streaks and lines ; the head buffish, with two black-brown bands on each side ; tail-forks moderate ; whole body, head, and tail covered with short buffish hairs ; on median line four or five short fleshy points.

Food plant : banana.

Described and figured from several larvae sent by F. Schimpf, San Bernadino, Paraguay.

Caligo prometheus epimetheus Feld.

(Pl. V. f. 2)

Larva dark grey-brown, similar to the last in shape, with three or four lighter maroon-pink angular bands on markings, and a median pale line on first three segments and along the sides on a level with the spiracles; head with eight horns and four black-brown bands; tail-forks large, whole larva covered densely with short hairs, five rather long fleshy tubercles on dorsum.

Length of full-grown ♀ larva: 130 mm. = 5.2 in.

Food plant: banana.

Rio Aqua, W. Colombia, 1600–1800 m.

Figured and described from a larva sent by A. H. Fassl.

Caligo eurylochus Cram. and **Caligo brasiliensis** Feld.

Both Herr Stichel and Herr Fruhstorfer unite these forms with seven others as subspecies of *eurylochus* Cram. In the course of arranging the *Caligos* in the Tring Museum I was first struck by the much finer vermiculation and pattern below of *eurylochus*, *livius*, and *pallidus*, as opposed to *brasiliensis*, *sulanus*, *galba*, *morpheus*, *caesia*, and *minor*. On separating out my series of each, I at once found that I had specimens of *morpheus* and *livius* from **Central Colombia**, *galba* and an unnamed form from Sta Marta, *caesia* and an unnamed form near *eurylochus* from Venezuela. This proves that *eurylochus* Cram. and *brasiliensis* Feld. are two distinct species, each with a series of subspecies. I give below a synoptical table.

Owing to Herr Stichel having wrongly identified Mr. Kaye's *eurylochus minor* with his *teucer insulanus*, Fruhstorfer was led to redescribe the Trinidad form of *brasiliensis* as *eurylochus phryasus*, which becomes a pure synonym, and the Trinidad insect must stand as *brasiliensis minor* Kaye.

Caligo eurylochus eurylochus Cram., Guianas.

Caligo eurylochus livius Staud., Central Colombia to S. Peru.

Caligo eurylochus pallidus Fruhst., Bolivia.

Caligo brasiliensis brasiliensis Feld., Espiritu Santo to North Argentina.

Caligo brasiliensis sulanus Fruhst., Central America.

Caligo brasiliensis galba Deyr., North Colombia.

Caligo brasiliensis morpheus Stich., Central Colombia.

Caligo brasiliensis caesia Stich., Venezuela.

Caligo brasiliensis minor Kaye, Trinidad.

Caligo brasiliensis brasiliensis Feld.

(Pl. V. f. 9 larva, f. 10 pupa)

Larva very large, cylindrical, tapering both ways, and flattened on the back, dirty grey-yellow, with darker spotted dorsal line and irregular black lateral oblique stripes sloping down posteriorly; head with eight horns dirty white, with black lines; on fifth to eighth segments are soft conical protuberances about 4 mm. long; tail-forks 9 mm. long.

Pupa yellowish wood-brown, with black and red-brown streaks and short black bristles. When first hatched the larva is dirty white, changing rapidly to green, with a forked dorsal dark band, which colour it retains till third moult.

Food plant: banana.

Described and figured from a sketch by E. Hartgen and the description in *Seitz*.

***Caligo idomineus* Linn.**

Fruhstorfer in *Seitz* and Herr Stichel place *superba* Stand. as a subspecies of *idomineus*, but as *praecana* Stich. occurs together with it, I am convinced it is just as good and distinct a species as *menoetius* Stand.

***Caligo menoetius* Stand.**

The Tring Museum, besides a ♂ and ♀ from Surinam received from Herr Fruhstorfer in exchange, has obtained recently through M. Le Moult 3 ♂♂ from St. Jean de Maroni, French Guiana, of this rare insect.

***Caligo arisbe fulgens* subsp. nov.**

♂♀. Differ from *a. arisbe* in being above much brighter yellow, and the greyish yellow band in the centre of the outer black-brown fourth of forewing is much broader and very distinct.

Hab. Rio Janeiro and São Paulo, 3 ♂♂, 6 ♀♀.

***Caligo oberthuri oberthuri* Deyr.**

(Pl. V. f. 3)

Larva almost entirely brown-black, with several dorsal irregular light brown patches; tail-forks short, thick, and covered with stiff rufous hairs, the four fleshy thornlike dorsal appendages bent forward; head rufous brown, with black lines and with eight thorns.

Food-plant a low evergreen palm.

Described and figured from two larvae sent by A. H. Fassl from San Antonio, West Cordillera, Colombia, 2000–3000 m. = 6500–9000 ft.

BRASSOLIDAE

***Brassolis sophorae sophorae* Linn.**

(Pl. VI. f. 7 larva, f. 9 pupa)

Larva cylindrical, tapering towards head, mouse-grey with darker longitudinal lines and bands, the two subdorsal ones being very wide, while the dorsal and lateral ones are very narrow; but the one on the line of spiracles is again broader, but less sharply defined; head with two broad black bands.

Pupa reddish wood-brown, banded and spotted with dark brown and with a whitish irregular patch on the wing-cases.

Described and figured from a sketch by E. Hartgen.

Food-plant: palms, feeding gregariously.

***Brassolis sophorae vulpeculus* Stich.**

This form is not confined to Argentina and Paraguay, as Stichel and Fruhstorfer believed, but is found in all the arid and desert portions of Brazil as well, and it also occurs in British Guiana as a rare aberration,

I have 2 ♂♂ and 2 ♀♀ from Maranhão, and 2 ♂♂ from Rio Demerara.

Larva similar to *s. sophorae*, but ground-colour much suffused with brownish yellow, and the bands are dark chocolate brown.

Described from larvae sent by J. Steinbach from Tucumán and by F. Schimpf from San Bernardino, Paraguay.

***Brassolis astyra astyra* Godt.**

(Pl. VI. f. 8)

Larva similar to *B. sophorae*, but thicker, much more suffused with dirty yellow, and the bands broken up into spots, while innumerable narrow dark transverse lines encircle the body from the head to anal segment.

Figured and described from two larvae from Rio.

***Brassolis astyra rufescens* subsp. nov.**

♀. Very large and the oblique band of forewing as wide as in ♀ *a. maritima* Stich., but rusty orange scarlet, not rusty orange.

Hab. Peru, 1 ♀, Huancabamba, Cerro de Pasco (C. Böttger).

***Brassolis isthmia* Bates and *granadensis* Stich.**

I cannot see anything more than two subspecies in these two—a northern and a southern subspecies of one species.

***Brassolis isthmia boliviana* subsp. nov.**

♂♀. Larger than either *isthmia isthmia* Bates or *isthmia granadensis* Stich.; differs above in the ♂ in the oblique band being much darker, orange rufous as in the ♀, and between veins 2 and 3 it is strongly produced; in the ♀ the black discocellular band is much larger than in either of the other forms. Below it is paler in both sexes.

Length of forewing; ♂ 46 mm., ♀ 62 mm. Expanse: ♂ 101 mm., ♀ 133 mm.

Hab. Bolivia, 1 ♂, Buenavista, E. Bolivia, 750 m. = 2437 ft., August 1906—April 1907; 1 ♀, Prov. Sara, Sta Cruz de la Sierra, April—May 1904 (J. Steinbach).

DISCOPHORIDAE

These insects, in my opinion, bear the same relationship to the *Amathusiidae* as the *Morphidae* do to the **Brassolidae**.

***Enispe euthymius intermedia* subsp. nov.**

This race is exactly intermediate between *e. euthymius* and *e. durania*, having the dark bands and spots more developed than the former, but not so much as in the latter.

Hab. Burma to the Malay Peninsula and Siam, 3 ♂♂, Bernadmayo and North Chin Hills, Tavoy (Bingham); 5 ♂♂, Perak; 1 ♂, Paughir, Shan States, 3000 ft.

MORPHIDAE

Here I have much to say, but in many cases the facts are so difficult to work out that I must leave some of my remarks for a future paper.

***Morpho perseus richardus* Fruhst.**

(Pl. VI. f. 1)

Larva slug-like, narrowing rapidly towards head, thickly clothed with very short hair, and with rows of hair tufts along the back and sides, deep red with small black and yellowish buff patches.

Described and figured from a larva from Minas Geraes.

***Morpho perseus iphielus* Feld.**

(Pl. VI. f. 3 larva, f. 4 pupa)

I am unable to see any difference between Colombian *p. iphielus* (type Felder coll.) and the series collected on the Cauca River by S. M. Klages.

Larva deep red with irregular cream-coloured bands.

Pupa with two short points on head bright grass-green.

Described and figured from larvae and pupae sent by S. M. Klages, Maripa, Cauca River.

***Morpho patroclus phokylides* Fruhst.**

(Pl. VI. f. 2)

Larva orange buffy yellow, strigillated and streaked with deep red; on third, sixth, and seventh segments twin golden yellow patches edged with deep red, and on the fourth, fifth, seventh, and eighth segments is a large single golden yellow patch, also edged with red; tufts of hair pale crimson.

Figured and described from two beautifully preserved larvae sent by J. Steinbach, Buenavista, E. Bolivia, August 1906—April 1907.

***Morpho sulkowskyi ockendeni* subsp. nov.**

♂. Differs from all other forms in the hindwing between costa and vein 3 being enormously produced.

♀. Differs from all other forms in the dark outer band-like margin of forewing being red as on the hindwing, not black or dark brown.

Hab. S.E. Peru, Carabaya (G. Ockenden).

***Morpho aurora interposita* subsp. nov.**

♂. Intermediate in colour between *aurora* and *aureola*, and still larger than *aurora*.

♀. Larger, paler, more the colour of *Morpho portis*, a large brown patch followed by a white on upper discocellulars, reaching far in and also beyond cell of forewing; marginal black-brown border twice as wide as in ♂, and containing two pinkish lines. Hindwing: outer fourth pinkish cinnamon brown with two irregular dark brown bands coalescing at nervures. Below as in ♂, but paler, and with a strong greenish opalescent wash.

Hab. S.E. Peru, La Oroya, Inambari, and Santo Domingo, Carabaya, 28 ♂♂, 1 ♀, 3100–4500 ft., 1901–1905 (G. Ockenden).

Morpho adonis Cram., **Morpho adonis major** Lathy, **Morpho marcus** Schaller,
Morpho eugenia Deyr., and **Morpho uraneis** Bates

Here we find a most awful confusion. Herr Fruhstorfer has stated that *eugenia* Deyr. is the same as *adonis* Cram., while he keeps *uraneis* Bates as a separate species, and he places *marcus* Schaller as the ♀ of *adonis* Cram. The truth is that *eugenia* Deyr. is **not** the same as *adonis* Cram., but is an insect with much shorter, blunter, and broader wings, and much more silvery blue colour; in fact, it bears the same relationship to the Guiana *adonis* Cram. as *uraneis* Bates does to *adonis major* Lathy from the Peruvian Amazon, which latter is not mentioned by Fruhstorfer. Now as to *M. marcus* Schaller: this has been held by most entomologists, including Herr Fruhstorfer, to be the ♀ of *adonis* Cram., and it is certainly taken in the same localities with it. However, the only recorded specimen taken in copulation with a ♂, and now in the collection of Mr. Ch. Oberthür, was undoubtedly taken in copulation with a ♂ *eugenia* Deyr., and **not** with an *adonis* Cram. ♂. I have two fine ♀♀ of *M. uraneis* Bates, as well as three ♂♂, and they are exactly similar to *M. marcus* Schaller, only nearly double the size, and have perfectly rounded hindwings, with no sign of the tail-like anal appendage always present in all Guiana ♀♀ = *marcus* Schaller, which have been figured or which I have seen—*i.e.* two in Tring, several in the British Museum, one in Mr. Kaye's collection, the ones figured by Schaller and Oberthür, and the photographs I have of eight in the collection of Mademoiselle de Florrack of Paris. In the collection of the late Mr. Adams, now in the British Museum, are the types of Mr. Lathy's *M. adonis major*, two ♂♂, one ♀, collected in Peru by Messrs. H. and C. Watkins. The ♀ resembles my two ♀♀ of *uraneis* Bates, and is probably a small ♀ of that species, especially from the fact that Mr. Maxwell Stuart, when he took mine on the Rio Cachiaco, collected also a number of ♂♂ of *adonis major*. In view of the fact that the only proof we have by actual capture in copulation gives us *marcus* paired with *eugenia*, I am inclined to believe that we do not know the true female of *adonis*. If this is really the case, then *marcus* antedates *eugenia* by some eighty or more years, and we have the following two species to tabulate.

Morpho marcus marcus Schaller, Guiana.

Morpho marcus uraneis Bates, Peru and Peruvian Amazons.

Morpho adonis adonis Cram., Guianas.

Morpho adonis major Lathy, Peru and Peruvian Amazons.

Mr. Kaye has advanced the theory that *eugenia* is the dry-season form of *adonis*. I cannot at present agree to this, as Mr. Le Moutt has received considerable series of both taken at the same time, and I have 11 ♂♂ of *adonis major* captured by Mr. Maxwell Stuart at the same time and place on the Rio Cachiaco as the *uraneis* mentioned above. I fear, however, this confusion will not be finally cleared up till *adonis* ♀ has been bred or taken in copulation with an undoubted ♂.

Morpho cypris schausi subsp. nov.

♂. Above has the wide white band of *c. bugaba* Staud. from Chiriqui, but is as large as the largest typical *c. cypris*. Below has even larger ocelli than *c. cypris*, **not** the tiny ones of *c. bugaba*.

Hab. Costa Rica, 1 ♂, Carillo (W. Schaus).

Morpho alexandrowna Druce

This form has absolutely nothing to do with *M. godarti*, as Frnhstorfer puts it, hinting that it may be the ♂ of *alexandra* Hew. It is the Central and Southern Peruvian race of *menelaus* Linn., with the dark border slightly less pronounced than in *melacheilus* Stand.

Morpho alexandra Hew.

This insect has been rightly placed by Frnhstorfer under *godarti*. I have been able to definitely discover, with the help of Mr. Watson of Manchester, that the type is no longer in existence, but there is no doubt that it was a specimen of the S.E. Peruvian race of *godarti* Guér. The Tring Museum possesses 22 ♂♂ and 1 ♀ from the Carabaya and Rio Inambari districts from G. Ockenden, and 1 ♀ from Yahuar Mayo from H. and C. Watkins.

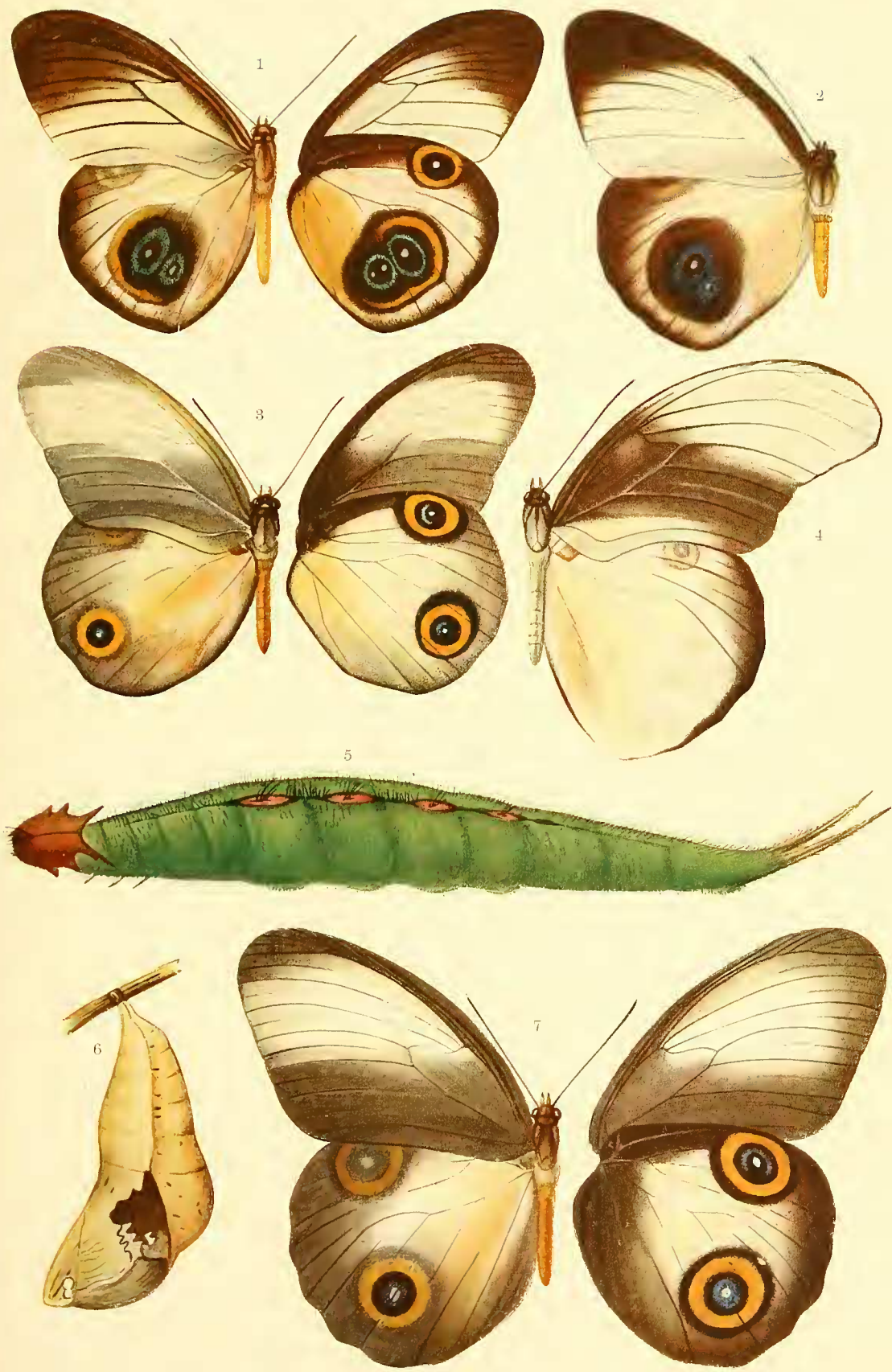
[Hartgen's unpublished sketches mentioned in the preceding pages are contained in the Tring Museum Library.]

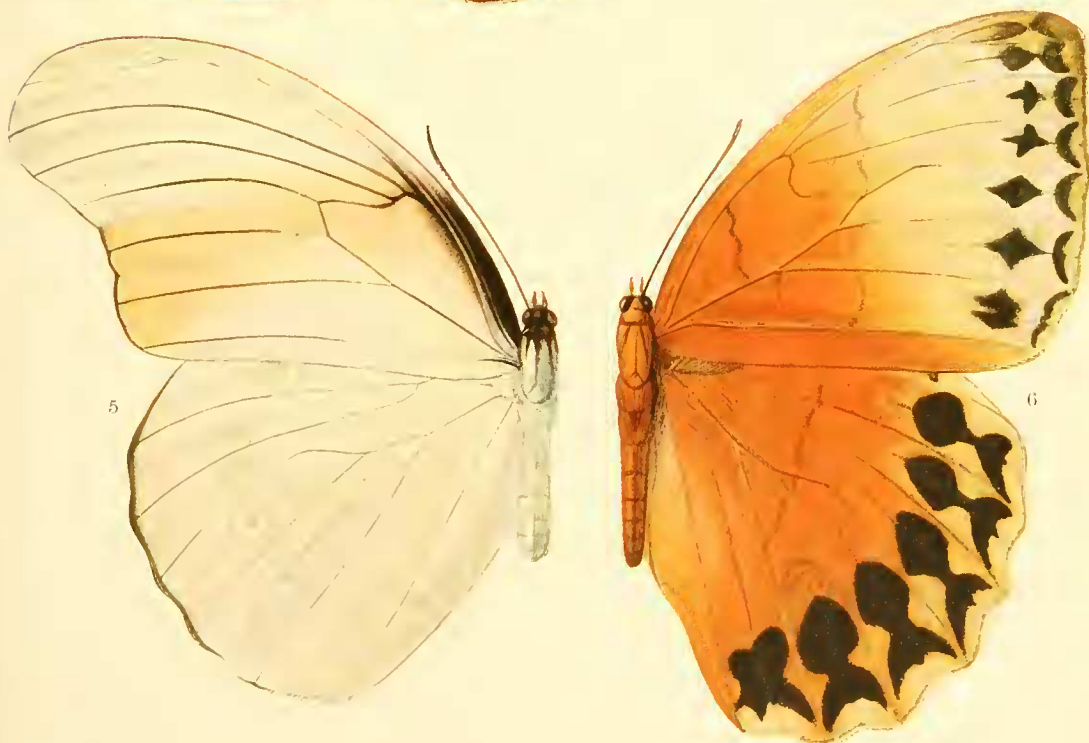
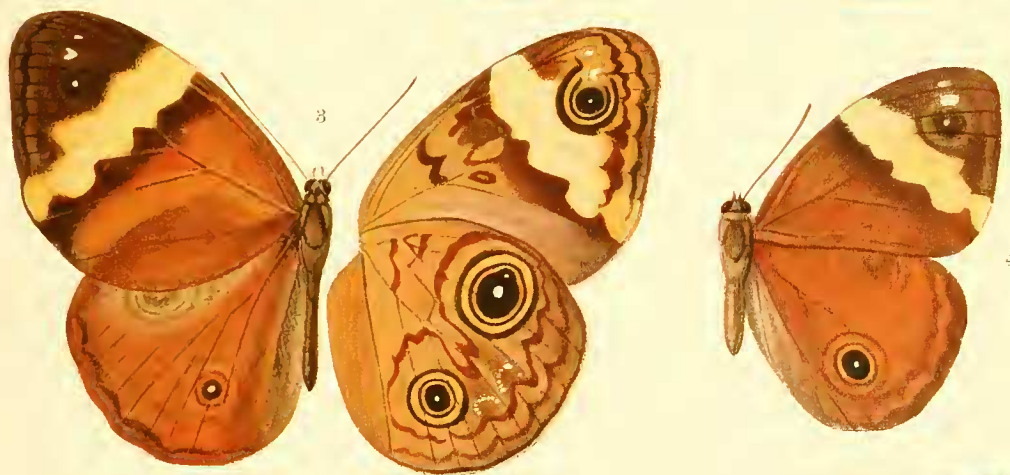
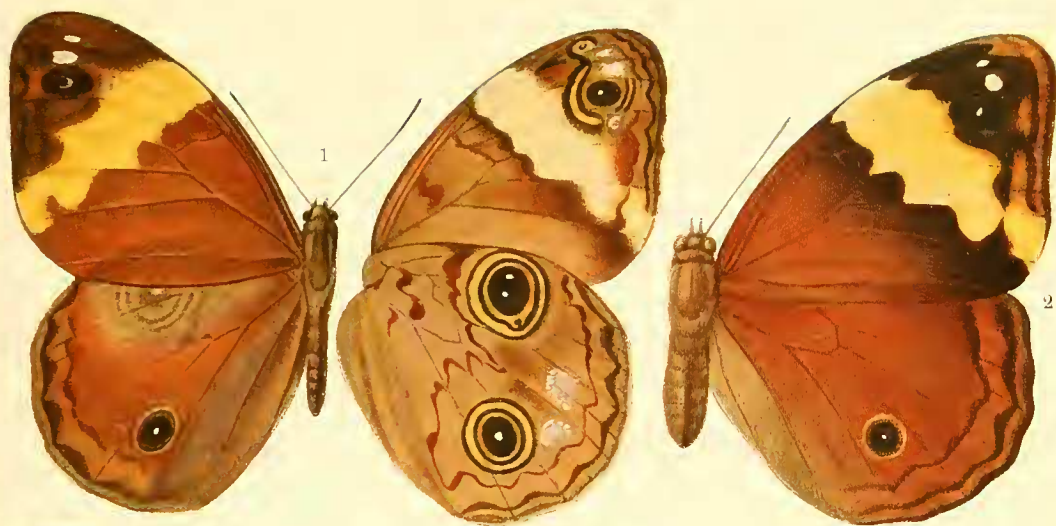
THE NAME OF THE CENTRAL EUROPEAN CORMORANT.

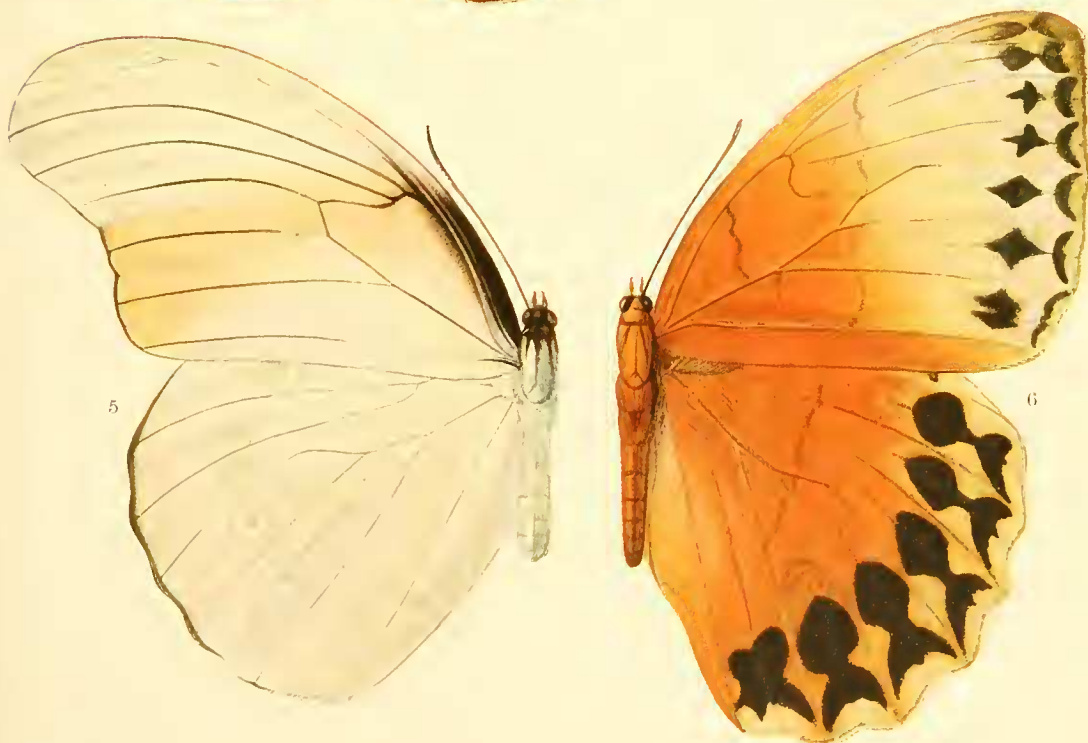
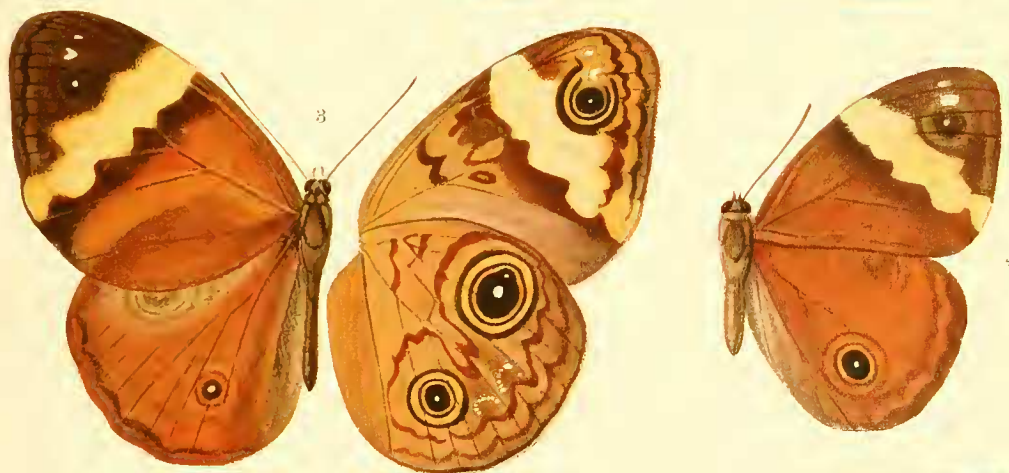
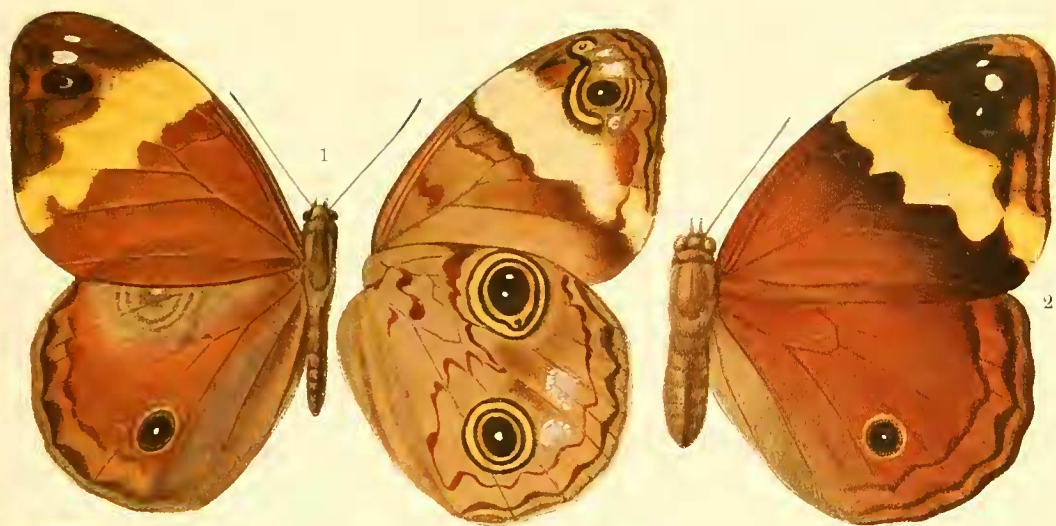
BY DR. ERNST HARTERT.

Antea, pp. 293-5, I discussed the names of the two subspecies of large European Cormorants, and came to the conclusion that Brehm's name *arboreus* was doubtful, and that *subcormoranus* (of the same date) was preferable. This discussion is now unnecessary, because the name *subcormoranus* was published already seven years before that of *arboreus*—viz. in Brehm's *Ornis* i. p. 42 (1824—"Holland"), and is therefore alone valid by priority.

This name is one of many of Brehm's names which were published years before the dates under which they have hitherto been quoted in literature. A full list of all these earlier dates will be published in the *Novitates Zoologicae* for 1917.

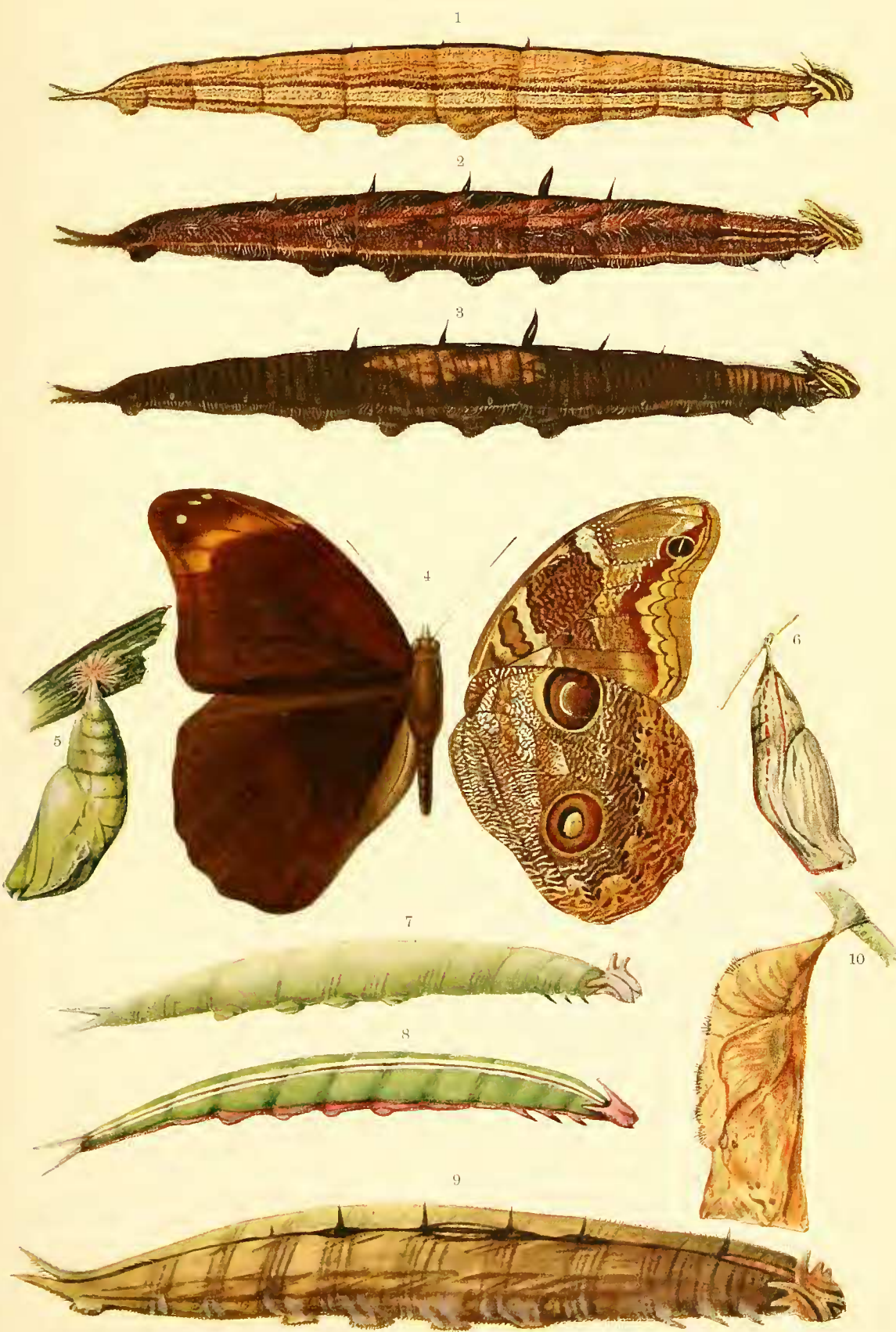






EXPLANATION OF PLATE V.

Fig. 1.	<i>Caligo ilioneus pampeiro</i>	larva	.	.	.	.	.	.	p. 312
„ 2.	„	<i>prometheus epimetheus</i>	larva	-	-	-	-	-	p. 313
„ 3.	„	<i>oberthuri oberthuri</i>	larva	.	.	.	.	.	p. 314
„ 4.	<i>Opsiphanes flemmingi</i>	♂	-	-	-	-	-	-	p. 311
„ 5.	„	<i>cassiae lucullus</i>	pupa	.	.	.	.	.	p. 311
„ 6.	„	<i>batea batea</i>	pupa	-	-	-	-	-	p. 310
„ 7.	„	<i>cassiae lucullus</i>	larva	.	.	.	.	.	p. 311
„ 8.	„	<i>batea batea</i>	larva	-	-	-	-	-	p. 310
„ 9.	<i>Caligo brasiliensis brasiliensis</i>	larva	.	.	.	.	.	.	p. 313
„ 10.	„	„	pupa	-	-	-	-	-	p. 313



EXPLANATION OF PLATE VI.

Fig. 1.	<i>Morpho perseus richardus</i>	larva	.	.	.	.	.	.	p. 316
„ 2.	„ <i>patroclus phokylides</i>	larva	-	-	-	-	-	-	p. 316
„ 3.	„ <i>perseus iphicles</i>	larva	.	.	.	.	.	.	p. 316
„ 4.	„ „ „	pupa	-	-	-	-	-	-	p. 316
„ 5.	<i>Opsiphanes bogotanus bogotanus</i>	larva	.	.	.	.	.	.	p. 311
„ 6.	„ „ „	pupa	-	-	-	-	-	-	p. 311
„ 7.	<i>Brassolis sophorae sophorae</i>	larva	.	.	.	.	.	.	p. 314
„ 8.	„ <i>astyra astyra</i>	larva	-	-	-	-	-	-	p. 315
„ 9.	„ <i>sophorae sophorae</i>	pupa	.	.	.	.	.	.	p. 314
„ 10.	<i>Opsiphanes invirae remoliatu</i>	larva	-	-	-	-	-	-	p. 311
„ 11.	<i>Dynastor darius darius</i>	pupa	.	.	.	.	.	.	p. 310
„ 12.	<i>Opsiphanes invirae remoliatu</i>	pupa	-	-	-	-	-	-	p. 311
„ 13.	<i>Dynastor darius darius</i>	larva	.	.	.	.	.	.	p. 310

